

ABSTRACT

A power-supply apparatus for outputting from an output terminal via one or more switching elements, each having a control electrode, a voltage input to an input terminal, is disclosed. The apparatus includes a voltage-generating circuit for generating an output voltage V_o proportional to a voltage between an input end and an output end of the switching element so as to output the generated voltage, and a control circuit for controlling an operation of the switching element depending on the output voltage V_o of the voltage-generating circuit. The control circuit causes the switching element to reduce an output current when the output voltage V_o of the voltage-generating circuit exceeds a predetermined voltage V_s .